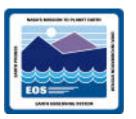


Huge Data Request Scenario Mark Huber

mhuber@eos.hitc.com

1 November 1995

Context



IDS Investigator wants 5 years of global MODIS L3 BDRF product (MOD09) as input to major modeling effort

Single request by authorized user

File size = 1.1 GB; Total request = 41,000 files = 44 TB

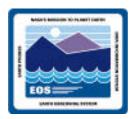
Impacts:

Data request exceeds single-order distribution capacity

• Interference with normal DSS functions for other pull users

Requester is not likely to use all the data immediately

Design Drill-Downs





Push+Pull drill-down:

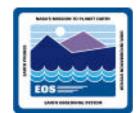
 Partitioning Large Requests - provides operator assistance to break up & manage large requests

Earlier drill-downs:

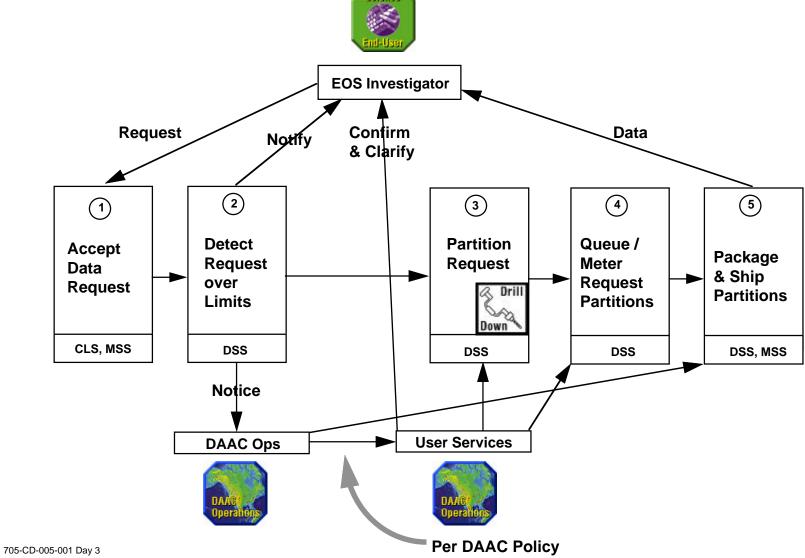
- Subsetting options for reducing data distribution volumes and providing "tailored" data sets
- Request Tracking end-to-end status of user requests

Huge Data Request



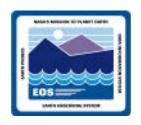


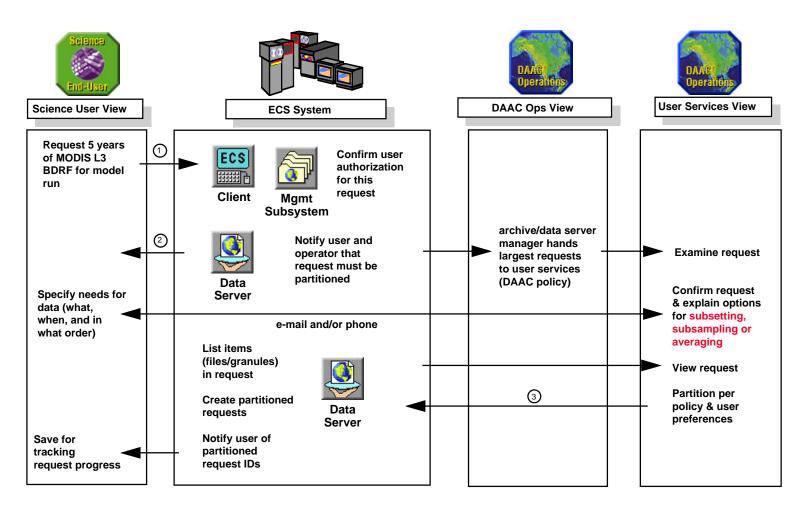
MH2-4



Huge Data Request

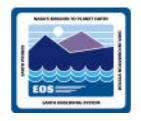
Points of View - 1

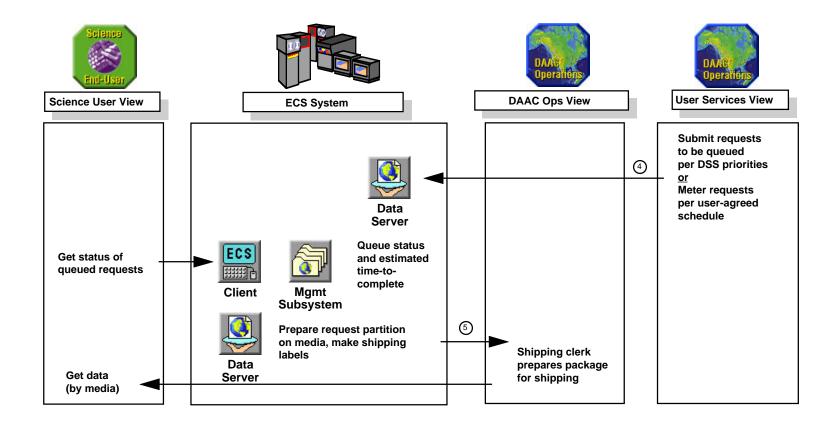




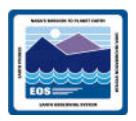
Huge Data Request

Points of View - 2





Summary



Automated detection of large data requests in DSS design

• Configurable limits on total volume and number of files
Operator aids provided to assist in partitioning large requests
Procedures/responsibilities dependent on DAAC-specific policies

Issues (to be resolved by CDR):

- Degree of automation desirable and justified
- Depends on frequency of large requests
 - Statistics by GDAAC (less than 1 request / day > 45 GB)
 - V1 granules much larger than V0 files -> need to adjust V0 statistics